

# A Guide to a Healthy and Lead-Safe Home for Children





# A Guide to a Healthy Home for Children

Every child deserves a healthy place to live, whether you own or rent. Because children are small and growing, they can be more sensitive to hazards in the home than adults. This booklet will help you protect yourself and your family. Dangers to children can be found in:

What They Touch



What They Breathe

What They Drink



What They Eat

The Los Angeles County Childhood Lead Poisoning Prevention Program, the American Lung Association of Los Angeles County, and the Los Angeles Department of Water and Power have joined forces to help parents ensure a healthy home for their children.



Healthy Homes = Healthy Children = Healthy Future for Los Angeles

## What They Touch...

Most parents know to keep small objects away from children to prevent choking (young children tend to place objects in their mouths). Did you know that children pick up large amounts of dust on their hands that can also be dangerous? Older housing may contain lead contaminated dust, especially if there's any peeling or chipping paint. Lead is a heavy metal. Lead is also a poison, and can damage the brain, kidneys, liver, and other organs. Even small amounts can cause learning problems and changes in behavior. Each year, over 2000 Los Angeles children are identified with elevated blood lead levels, and between 300 and 500 children require a home visit by a nurse and an Environmental Health Specialist (Inspector).

## What They Breathe...

Children breathe 50% more air for their weight than adults. Unfortunately, the air they breathe inside the home can sometimes be worse than the outside air. Poor indoor air quality can cause headaches, nausea, and fatigue. It can also trigger asthma. Asthma is the leading serious chronic illness among children and is characterized by chronic inflammation of the airways. Over 5 million children in the United States have asthma, which is responsible for 10 million lost school days every year.

## What They Eat...

A healthy diet, rich in vitamins and nutrients, protects children from illness and limits damage from lead poisoning. However, food and drink can become contaminated with lead when cooked or kept in containers that may contain lead, such as clay pots, ceramic dishes, and leaded crystal glassware.



## What They Drink...

Los Angeles water comes to your home lead-free. However, small quantities of lead may get into your tap water from plumbing fixtures that contain lead, such as water meters, brass faucets, or pipes joined with lead-based solder. Since you cannot see, taste, or smell lead in the water, **testing is the only sure way** to detect the amount of lead, if any, in your drinking water.





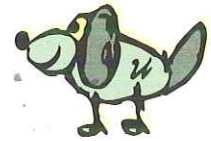
# A Healthy Home check List



To find out if your house is a healthy home, answer these questions. Some questions are easy, for others you'll need to walk around your house. If you circle yes for any question, check the answers starting on the next page for valuable tips on how to improve your home's indoor environment.

## Touch

- |   |     |    |
|---|-----|----|
| 1. Was your house/apartment built before 1978?* | Yes | No |
| 2. a. Do you have old wooden windows?           | Yes | No |
| b. Do you have peeling paint?                   | Yes | No |
| 3. Do you have wall-to-wall carpeting?          | Yes | No |
| 4. Do you own pets?                             | Yes | No |
| 5. a. Do you have bare soil in your yard?       | Yes | No |
| b. Do you live near a lot of traffic?           | Yes | No |
| 6. Do you have a leaky roof?                    | Yes | No |



## Breathe

- |   |     |    |
|---|-----|----|
| 7. Is your house insulated?   | Yes | No |
| 8. a. Is there a problem with ventilation in your bathroom?   | Yes | No |
| b. Is there a problem with ventilation in your kitchen?   | Yes | No |
| 9. Do you or family members smoke indoors?  | Yes | No |
| 10. Do your children have breathing problems, like asthma?  | Yes | No |
| 11. Do you work in a job that exposes you to lead (i.e., construction, battery manufacturing/recycling, shooting range, etc.) | Yes | No |
| 12. Do you have visible molds on the walls, or do certain areas smell musty?  | Yes | No |
| 13. Do you have cockroaches in the house?   | Yes | No |
| 14. Do you have heavy cloth drapes or upholstered furniture?  | Yes | No |



## Eat

- |   |     |    |
|---|-----|----|
| 15. Do your children suffer from anemia (low iron count)?   | Yes | No |
| 16. Do you give your children folk remedies from other countries (Mexico, Central America, Asia, India, the Middle East)? | Yes | No |
| 17. Do you use imported ceramics for cooking, serving or storing food?  | Yes | No |
| 18. Do you store food or drink in leaded crystal?   | Yes | No |
| 19. Do your children eat snacks outside while playing or before washing their hands?                                      | Yes | No |



## Drink

- |  |     |    |
|--|-----|----|
| 20. Is your plumbing less than five years old?   | Yes | No |
| 21. Do you have brass faucets or fancy fixtures? | Yes | No |
| 22. Is your water cloudy or colored?             | Yes | No |



\*To find the age of your house/apartment on the internet, go to [www.assessor.co.la.ca.us](http://www.assessor.co.la.ca.us). Click on property data, then accept and finally search by property address.



# Answers to the Questions on the Previous Page

## TOUCH

1. If your home or apartment building was built before 1978, chances are that the old paint contains lead. You need to take special precautions if you are repairing or remodeling your home, because exposure to lead-based paint, lead dust, or paint chips is a health hazard, particularly for children.



**Solution:** A homeowner may test for lead in paint and soil by hiring a State of California Department of Health Services certified inspector or by collecting samples and sending them to an Environmental Protection Agency (EPA) accredited lab. For more information, and a list of EPA accredited labs in California, go to the website at [www.dhs.ca.gov/childlead](http://www.dhs.ca.gov/childlead) or call the Los Angeles County Childhood Lead Poisoning Prevention Program at 1-800-LA-4-LEAD. Also, check the "Lead Safe Work Practices" on page 9 of this brochure.

2. Residential paint manufactured prior to 1978 contain lead. Old paint that is chipping or peeling creates dust. This dust, which may not be visible, can settle on floors and other surfaces where it gets on children's hands and into their mouths. Window wood frames are a major source of lead dust, as the raising and lowering of the window creates friction sources, where paint starts to powder and chip.

**Solution:** If paint is kept intact and surfaces are kept clean, children can live safely in a house that has lead-based paint. To keep paint from chipping or peeling, control moisture. Wipe up all dust and chips regularly with a wet mop and rags. Temporarily cover chipped areas with cloth tape. For a permanent solution, hire a state-certified worker or contractor to either remove the wooden window unit or remove the paint. See "Lead Safe Work Practices" on pg. 9 for more details. If you/they must remove it from the inside, keep children out of the room until the work is finished and area is clean. Cover the floor with thick plastic sheeting (at least 6 millimeters) before window removal to collect the waste and debris. Seal the debris in the plastic for disposal. Also, see answer #1 for testing paint for lead.

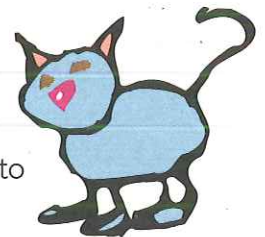


3. Wall-to-wall carpet traps dust and paint chips, and is almost impossible to keep clean. Since young children play on the floor, carpeting can be a source of lead exposure and contribute to poor indoor air quality.

**Solution:** Vacuum carpet with a High Efficiency Particulate Air (HEPA) filter-equipped vacuum cleaner. HEPA filters prevents lead particles from being released back into the air. Steam-clean carpets, drapes and upholstery, especially if a HEPA vacuum is not available. If family members have asthma or other breathing problems, remove wall-to-wall carpeting if possible and use area rugs that can be washed or replaced easily.

4. Pets, including dogs, cats, hamsters, guinea pigs and birds may cause allergies. Pet dander (the skin, hair and dust of pets) may cause/trigger asthma.

**Solution:** If your child has asthma that gets worse around the pet, then the pet needs to be removed from the home. However, parents can try other alternatives to cut down on pet dander. First, always keep pets away from bedrooms. Second, bathe your pet once a week.





5. Soil contains small amounts of lead naturally. However, soil may contain increased levels of lead from man-made sources such as chipping exterior paint, factories handling lead, or fallout from motor vehicle exhaust. Since children play outside, often in the dirt, lead-contaminated soil is a major source of lead poisoning.

**Solution:** Place a barrier to prevent children and pets from playing in bare soil such as a fence, shrubs, grass or ground cover. Wiping shoes on a doormat or removing shoes before entering the house can keep lead from being tracked inside. See answer #1 for testing soil for lead.

6. A leaky roof allows moisture to seep inside, causing paint to blister, flake and chip. This may create a hazard to your family if the paint contains lead. If you see water stains on the ceiling, you may have a leaky roof.

**Solution:** **For people who own their property:** Repair roof as soon as possible, making sure that workers use 'lead-safe' work practices. **For people who rent:** Cover chipping and flaking paint with cloth tape. This will keep the paint from falling to the floor, where children may be exposed. Report leaks to property owner/manager immediately.

## Breathe

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7. A well-insulated house can cut down on energy bills, but it can also allow indoor air pollution to build up, and trap moisture. Moisture can cause paint to chip and flake, and allow molds to grow. Carbon dioxide and other gases can accumulate to potentially dangerous levels.

**Solution:** Open windows to increase ventilation. Install fans with exhaust vents in the bathroom and kitchen to help keep down moisture. Regularly clean air conditioner filters to keep indoor air pollutant levels down.

8. Fans in the bathroom and kitchen cut down on moisture, which can lead to mold growth and indoor air pollution. Blocked vents allow moisture and indoor air pollutants to build up.

**Solution:** If the fans are not working and/or the vents are blocked, fix them and use while cooking, showering or bathing. If you do not have fans in these two areas, install them. Keep filters in vents clean.

9. Secondhand smoke can cause cancer in non-smokers, and can trigger asthma.

**Solution:** Cigarette smoking should not be allowed in the house if there are children or adults with asthma or allergies. Ask family members and friends to smoke outdoors. Call your local American Lung Association at 1-800-LUNG-USA for information on secondhand smoke and quitting smoking.



10. If your child has been diagnosed with asthma, there are many things you can do inside the home to help control this disease.

**Solution:** Work with your doctor to identify asthma "triggers." Triggers are elements in the environment that cause asthma episodes. Common triggers are cold weather, cockroaches, pet dander, molds, and dust mites. Your local American Lung Association can provide you with information on how to improve indoor air quality to help asthma. Following the suggestions in this brochure will also help.



11. If you work in a job that exposes you to lead, you may be bringing it home in the form of dust on your clothes.

**Solution:** At the work site, vacuum dust from clothing using a HEPA filter equipped vacuum cleaner. Change your clothes and shoes before leaving the work site to avoid contaminating other areas, and wash work clothes separately from the family laundry. Shower and wash your hair immediately to remove any dust.



12. Visible mold on the wall indicates a leaky roof or trapped moisture. Poor ventilation, leaky plumbing, and failed seals around tubs and toilets are common causes of moisture accumulation. Molds release spores into the air, which can cause allergy reactions and flu-like symptoms in humans. A "musty" smell is also an indication that there may be uncontrolled moisture present allowing mold to grow under sinks or behind walls.

**Solution:** If possible, identify the source of the moisture and fix it. Remove mold with a chlorine-based solution. De-humidifiers can help decrease moisture, especially in basements, thereby limiting mold growth. If the problem persists, hire a trained and certified worker to remove the mold and find the source of moisture.

13. Cockroaches carry disease, and can trigger asthma and allergies. They can also contaminate food.

**Solution:** Immediately fix any water leaks, as cockroaches love moisture. Don't leave food out unattended. Keep trash picked up and properly disposed of. Place boric acid, powder or gel, behind/under refrigerators, stoves and sinks (areas that normally harbor moisture and warmth) to get rid of roaches. You might consider placing boric acid gel behind the baseboards as well. Be careful when using roach traps and sprays to avoid contaminating food and surfaces where children and pets have contact.



14. Heavy cloth drapes and upholstered furniture are difficult to keep clean, and can trap dust.

**Solution:** Replace drapes with vertical or horizontal blinds that are easier to keep clean. Use a HEPA vacuum on upholstered furniture. Steam-clean regularly. Wash throw pillows regularly in hot water to kill dust mites. If family members have asthma or are allergic, you should consider replacing upholstered furniture with wooden, vinyl, or leather furniture.

## Eat

15. Children who are anemic are more at risk for lead poisoning.

**Solution:** Have your child tested for lead with a simple blood test done by your doctor. Feed children diets high in iron and calcium (spinach, meats, cereals, milk, cheese, etc.) to prevent anemia.

16. Several folk remedies from Mexico, Central America, Asia, India and the Middle East contain large amounts of lead (up to 95%). These medicines are usually powders. The colors of these home remedies vary. Some are bright red, orange, yellow, grayish yellow, or in the case of *Albayalde*, white. *Surma* is used in East India and Armenia as eye make-up and for the healing of the umbilical cord of the child after birth. Other folk remedies that contain lead are: *Pay-Loo-Ah* from Cambodia, *Albayalde* from El Salvador; *Greta* (lead oxide), *Azarcon* (lead tetraoxide) also known as the following: *Alarcon*, *Coral*, *Liga*, *Maria Luisa* and *Rueda* (*Rue/Ruda* is the plant and not a source of lead poisoning) from Mexico.

**Solution:** Stop use immediately. Have your child tested for lead poisoning.

Is fixing the problem too expensive? See inside back cover.



17. Imported brightly colored mugs, dishes and terra cotta pots often contain lead. This lead can leach into your food during cooking, serving or storage. It is especially harmful to children, pregnant women, and unborn babies.

**Solution:** Test dishes with inexpensive home lead test kits available at local hardware stores. If a test is positive for lead, discontinue use.



18. The United States Food and Drug Administration (FDA) warns that leaded crystalware does leach lead into food and alcoholic beverages.

**Solution:** Do not store alcoholic beverages in lead crystal decanters. Pregnant women and children should not drink from lead crystal glasses. Infants should not be fed with lead crystal baby bottles.

19. Children who eat outside or don't wash their hands before eating run the risk of lead exposure if food gets dirty from contaminated soil and then winds up in their mouths.

**Solution:** Teach children to always wash their hands before eating, and to never eat anything that touches the floor or ground. Try to keep children from playing in bare soil. If you suspect your child has been exposed to lead, ask your doctor to run a lead test.

## Drink

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20. Even though California banned lead solder in 1986, it can still be found in some home plumbing systems today. Over the years, mineral deposits from the water form a coating on the inside of the pipes. This coating protects against lead contamination. However, it may take up to five years for an effective coating to form. Consider the following steps to reduce exposure to lead in drinking water:



- Use water only from the cold water tap for drinking, cooking, and especially for making baby formula.
- Run the cold water tap for one minute whenever the tap has not been used for 6 hours or more. Save this "flushed" water for plants or cleaning purposes.
- Have your water tested by a state-certified laboratory. Call the State of California, Department of Health Services at (213) 580-5731 for a list of state certified laboratories.

21. Many household faucets and fixtures are manufactured with brass parts. Brass contains some lead. Lead can leach from new faucets and fittings into your drinking water.

**Solution:** If possible, use only "National Sanitation Foundation (NSF) approved" faucets. The NSF is an independent testing agency. Look for the NSF mark on faucet packaging, or call NSF at 1-877-8-NSF-HELP, or visit their website at [www.nsf.org](http://www.nsf.org) for a list of NSF approved faucets and plumbing materials. In addition, follow the steps in #20 to reduce lead exposure.

22. Cloudy or colored water, stained dishes and laundry are often signs of corrosion, a chemical reaction between water and metal pipes. Corrosive water can dissolve lead that may be in faucets, supply pipes, or solder used to connect pipes.

**Solution:** Run the cold water tap until water runs clear. Call your local water supplier to get more information on the level of water corrosion in your neighborhood. In addition, follow the steps in #20 to reduce lead exposure.



# Repainting or Remodeling old Houses?

## LEAD-SAFE WORK PRACTICES



**DANGER:** Houses and apartment buildings built before 1978 may contain lead-based paint. Sanding, scraping, or otherwise disturbing lead paint can release large amounts of toxic lead dust. This dust, which may not be visible, can settle on floors and other surfaces where it gets on children's hands and into their mouths.

1. Be careful when repainting. Even if the top layer of paint is lead-free, older layers of lead paint may remain underneath. When working with lead-based paint, use a respirator certified by **NIOSH** that will filter out lead dust particles, such as one equipped with a HEPA filter. A respirator is a device worn to cover the mouth and nose.
2. Keep children and pregnant women away from the work area. Protect yourself and the other workers with the following:



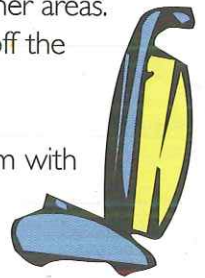
- Protect your eyes - always wear safety goggles or safety glasses
- Keep clothes clean or use disposable suit and shoe covers
- Wear respiratory protection - Wear a respirator equipped with a HEPA filter. A traditional dust mask will not prevent lead particles from getting into your lungs.
- Avoid eating, drinking or smoking in the work area
- Wash hands and face each time you stop working

Seal off the workspace by covering entryways with thick plastic sheeting (ask for 6-millimeter polyethylene sheeting at the hardware store). Remove personal belongings from the area before starting work. Move furniture either out of the area or to the center of the room and cover with thick plastic sheeting.

3. **Working Inside:** Cover horizontal surfaces such as floors, carpeting, counter tops, and built-in shelves with thick plastic sheeting before starting work. Turn off forced-air heating and air conditioning systems. Cover heating and air conditioning vents with plastic sheeting.

**Working Outside:** Cover the ground and any flowers or plants with thick plastic sheeting to capture dust, paint chips and debris. Use bricks or rocks to hold the sheeting in place. Cover sandboxes with thick plastic sheeting as well. Avoid working in windy conditions, to keep the dust from blowing into other areas.

4. If you see paint flaking, mist with a water spray bottle to keep down the dust and gently scrape off the loose paint onto the plastic. This will keep the paint from chipping and falling to the floor where children may be exposed.
5. As the work progresses, control lead dust by vacuuming thoroughly and frequently. Use a vacuum with a HEPA filter. For large jobs, rent power tools that have HEPA vacuum attachments.
6. Avoid tracking lead dust out of the work area. Remove and wash work clothing separately and consider wearing disposable booties.
7. When disposing of old windows and doors, break them up to prevent people from recycling them, and wrap the parts in the same plastic sheeting used to cover floors and furniture. For single family dwellings, these components can be placed in a regular dumpster.
8. After you finish a job that involves lead paint, wet wash the floors, walls, window sills and other surfaces with soap and water.
9. Conduct a lead dust test at the end of the job. Contact an environmental lab for a sampling kit or hire an independent certified professional.



For more details, call 1-800-LA-4-LEAD (1-800-524-5323)



# Call the Following Agencies for More Information

## **LAC/DHS Childhood Lead Poisoning Prevention Program**

Information and treatment of lead poisoned children

[www.lapublichealth.org/lead/](http://www.lapublichealth.org/lead/)

1-800-LA-4-LEAD

1-800-524-5323

## **American Lung Association of Los Angeles County**

Association fighting lung disease

[www.lalung.org](http://www.lalung.org)

1-800-LUNG-USA

1-323-935-5864

## **Air Quality Management District**

To report the spread of lead dust due to construction

[www.aqmd.gov](http://www.aqmd.gov)

1-800-288-7664

## **Child Health and Disability Prevention Program**

CHDP - provides no cost health examination, including blood lead test, for children under 21

[www.dhs.cahwnet.gov/pcf/cms/html/chdp.htm](http://www.dhs.cahwnet.gov/pcf/cms/html/chdp.htm)

1-800-993-CHDP

1-800-993-2437

## **Consumer Nutrition Information Center**

Suggestions for healthy foods

[www.eatright.org](http://www.eatright.org)

1-800-366-1655

## **Consumer Product Safety Commission Hotline**

For information on lead in consumer products

[www.cpsc.gov](http://www.cpsc.gov)

1-800-638-2772

## **Environmental Protection Agency**

EPA - Home repairs and renovations

[www.epa.gov](http://www.epa.gov)

1-415-744-1124

## **EPA's Safe Drinking Water Hotline**

Information on lead in drinking water

[www.epa.gov/OGWDW](http://www.epa.gov/OGWDW)

1-800-426-4791

## **Hazardous Materials**

### **HAZ-MAT L.A. County Fire Dept.**

To report the spread of lead dust due to remodeling, call

[www.lacofd.org/htm/hhazmat.htm](http://www.lacofd.org/htm/hhazmat.htm)

1-323-890-4045

## **Hazardous Waste Roundups**

Disposal of hazardous materials (i.e., paint, oil, batteries, etc.)

[www.ladpw.org/epd](http://www.ladpw.org/epd)

1-888-CLEAN-LA

1-888-253-2652

## **Healthy Families**

State's low-cost health insurance for children ages 1-19

[www.healthyfamilies.ca.gov](http://www.healthyfamilies.ca.gov)

1-800-880-5305

## **LAC/Department of Public Works**

Household hazardous waste hotline

[www.ladpw.org](http://www.ladpw.org)

1-800-98-TOXIC

1-800-988-6942

## **Lead-Related Construction Information Line**

List of certified workers and contractors

[www.dhs.ca.gov/childlead](http://www.dhs.ca.gov/childlead)

1-800-597-LEAD

1-800-597-5323

## **Los Angeles Department of Water and Power**

Water quality help line

[www.ladwp.com](http://www.ladwp.com)

1-213-367-3182

## **Medi-Cal**

This program provides no-cost or low-cost medical care for families. For more information, call

[www.medi-cal.ca.gov](http://www.medi-cal.ca.gov)

1-888-747-1222

## **National Lead Information Center**

Information on protecting children, during home repairs and renovations

[www.epa.gov/lead](http://www.epa.gov/lead)

1-800-LEAD-FYI

1-800-424-LEAD

## **Occupational Lead Poisoning Prevention Program**

Lead concerns in the workplace

[www.dhs.cahwnet.gov/ohb/olppp](http://www.dhs.cahwnet.gov/ohb/olppp)

1-510-622-4332

## **Poison Control System**

For Poison Emergencies

[www.calpoison.org](http://www.calpoison.org)

1-800-876-4766



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What They Drink

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